

### Amendments to the Specification

Please replace the paragraph starting on page 4, line 27 with the following:

"In one embodiment, the chroma value  $C$  is substantially equal to  $\sqrt{a^2 + b^2}$ . Other formulations of chroma can be used as well, such as  $C = |a| + |b|$ , or  $C = \max(|a|, |b|)$ . At each pixel, if the chroma is greater than a first threshold, then the color of that pixel is preserved. The lightness of that pixel is set to a lower value  $L$  at 32. If the chroma is less than or equal to a second threshold, the chroma is removed at 34 by setting  $a=0$  and  $b=0$ . As an example, the two thresholds could both be set to 10, and lightness adjusted to 254. The modified values are then converted to the output color space. In another, both of the thresholds could be set to 20 for text mode, where the system is processing mostly text, and 10 for all other modes. All of the above specifics are merely for discussion purposes; no limitation on the scope of the invention is intended."

Please replace the paragraph starting on page 5, line 9, with the following:

"As can be seen by this process, the mapping of the lightness values and the determination of the background level at 26 must be done very carefully. In removing the background, the first step is estimating the background lightness level. Figure 3 illustrates one possible expansion of the process to estimate background level 26, using lead-edge data at 38. The lead-edge is usually the first half-inch of the page, where most documents have a top margin. In order to have an efficient hardware implementation, background estimation is processed line by line. The line of data is converted to LAB space at 24, the same process as in 24 of Figure 2."

Please replace the Abstract with the following:

"A method for background adjustment. A background lightness level in an original image is estimated. Pixels are then converted to a luminance-chrominance color space. Pixels have lightness levels equal to the background lightness level are mapped to a value corresponding to white as background pixels. Chroma values for the background pixels are compared to a threshold and adjusted as needed, either by adjusting the lightness value or by removing the chrominance values. The luminance-chrominance data is then converted to output space."